KBR:kbr 10/13/05 3382-66954-01 MS 306570.01

OIPE IAP35 OCT 20 2005 PATENT & TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66954-01
Application Number	10/680,072
Filing Date	October 6, 2003
First Named Inventor	Srinivasan
Art Unit	2621
Examiner Name	not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
CA		5,799,113	August 25, 1999	Lee
CA		5,970,173	October 19, 1999	Lee et al.
CA		6,281,942	August 28, 2001	Wang
CA		6,380,985	April 30, 2002	Callahan
CA		6,473,409	October 29, 2002	Malvar
CA		6,941,263	September 6, 2005	Wang et al.
CA		20050065780	March 24, 2005	Wiser et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
CA		Europe	966,841	December 29, 1999	Kalevo et al.

OTHER DOCUMENTS

Examiner's Initials*	Cite No. (optional)	
CA		Kotropoulos et al., "Adaptive LMS *L*-filters for Noise Suppression in Images," *IEEE Transactions on Image Processing*, Vol. 5, No. 12, pp. 1596-1609 (1996). [48 pp. as downloaded from the World Wide Web on April 30, 2001.]
CA		Webb, "Postprocessing to Reduce Blocking Artifacts for Low Bit-rate Video Coding Using Chrominance Information," *Proc. ICIP*, Vol. 2, pp. 9-12 (1996).
CA		Linares et al., "JPEG Estimated Spectrum Adaptive Postfiltering Using Image-Adaptive Q-Tables and Canny Edge Detectors," *Proc. ISCAS'96*, Atlanta GA, May 1996.
CA		Lee et al., "Blocking Effect Reduction of JPEG Images by Signal Adaptive Filtering," *IEEE Trans. on Image Processing*, Vol. 7, pp. 229-234, Feb. 1998.

EXAMINER SIGNATURE: /Chikaodili Anyikire/	DATE CONSIDERED: 01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		
	Attorney Docket Number	3382-66954-01
	Application Number	10/680,072
	Filing Date	October 6, 2003
	First Named Inventor	Srinivasan
	Art Unit	2621
	Examiner Name	not yet assigned

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
CA		Meier et al., "Reduction of Blocking Artifacts in Image and Video Coding," *IEEE Trans. on Circuits and Systems for Video Technology*, Vol. 9, No. 3, pp. 490-500, Apr. 1999.
CA		Chen et al., "Adaptive post-filtering of transform coefficients for the reduction of blocking artifacts," *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 11, No. 5, pp. 594–602, 2001.
CA		Choy et al., "Reduction of coding artifacts in transform image coding by using local statistics of transform coefficients," *IEEE International Symposium on Circuits and Systems*, pp. 1089–1092, 1997.
CA		Minami et al., "An optimization approach for removing blocking effects in transform coding," *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 5, No. 2, pp. 74–82, 1995.
CA		Zhang et al., "A new approach to reduce the "blocking effect" of transform coding," *IEEE Transactions on Communications*, Vol. 41, No. 2, pp. 299–302, 1993.
CA		Malvar, "Biorthogonal and Nonuniform Lapped Transforms for Transform Coding with Reduced Blocking and Ringing Artifacts," *IEEE Transactions on Signal Processing*, Vol. 46, No. 4, pp. 1043-1053, Apr. 1998.
CA		Malvar, "A pre- and post-filtering technique for the reduction of blocking effects," in *Proc. Picture Coding Symp.*, Stockholm, Sweden, Jun. 1987.
CA		Panis, "A method for reducing block artifacts by interpolating block borders," available at http://www.cs.mcgill.ca/~gstamm/Siemens1/paper1.html.
CA		Panis et al., "Reduction of block artifacts by selective removal and reconstruction of the block borders," Picture Coding Symposium 97, Berlin, Sep. 10-12, 1997.
CA		Wu et al., "Joint estimation of forward and backward motion vectors for interpolative prediction of video," *IEEE Transactions on Image Processing* 3(5):684-687, Sept. 1994.
CA		Printouts of FTP directories from http://ftp3.itu.ch , 8 pp. (downloaded from the World Wide Web on September 20, 2005.)
CA		Park et al., "A post processing method for reducing quantization effects in low bit-rate moving picture coding," *IEEE Trans. Circuits Syst.*, Video Technol., Vol. 9, pp. 161–171, February 1999.
CA		Apostolopoulos et al., "Post-processing for very-low-bit-rate video compression," *IEEE Trans. Image Processing*, Vol. 8, pp. 1125–1129, August 1999.

EXAMINER SIGNATURE:	/Chikaodili Anyikire/	DATE CONSIDERED:	01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

KBR:lar 04/26/06 3382-66954-01 MS 306570.01

APR 2 8 2006
PATENT & TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66954-01
Application Number	10/680,072
Filing Date	October 6, 2003
First Named Inventor	Srinivasan
Art Unit	2621
Examiner Name	not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
CA		6,249,610	6.19.2001	Matsumoto et al.
CA		6,466,624	10.15.2002	Fogg

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
CA		GB	2,365,647	2.20.2002	Knee et al.

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
CA		Lee et al., "Loop filtering and post-filtering for low-bit-rates moving picture coding," *Signal Processing: Image Communication 16*, pp. 871-890 (2001).
CA		Sun et al., "Loop Filter with Skip Mode," Study Group 16, Video Coding Experts Group, 8 pp. (2001).
CA		Cliff Reader, "History of MPEG Video Compression – Ver. 4.0," 99 pp., document marked December 16, 2003.

EXAMINER SIGNATURE:	/Chikaodili Anyikire/	DATE CONSIDERED:	01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

KBR:khr 02/23/04 3382-66954 256101

OIPE JC16 FEB 26 2004 PATENT & TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66954
Application Number	10/680,072
Filing Date	October 6, 2003
First Named Inventor	Srinivasan
Art Unit	2621
Examiner Name	--

U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Name
CA		5,787,203	7.28.1998	Lee et al.
CA		US-2002-0186890-A1	12.12.2002	Lee et al.
CA		US-2003-0152146-A1	8.14.2003	Lin et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Country

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
CA		Segall et al., "Pre- and Post-Processing Algorithms for Compressed Video Enhancement," Proc. 34th Asilomar Conf. on Signals and Systems (2000)
CA		"Windows Media Video V8 Decoding Specification, Section 3 Syntax and Semantics, Section 4.2.7 Loop Filtering, Section 4.4 Loop Filtering, Annex A Processing for Coding Noise Reduction," 27 pp. (2003).
CA		U.S. Patent Application No. 10/623,128, filed July 18, 2003.
CA		"Windows Media Video V9 Decoding Specification, revision 87, Section 3 Syntax and Semantics, Section 4.9 In-loop Deblock Filtering, Annex A Processing for Coding Noise Reduction," 57 pp. (2003).
CA		Study Group 16, Video Coding Experts Group "Report of the Ad Hoc Committee on Test Model Enhancement and Software Development," 2 pp. (1997).
CA		Study Group 16, Video Coding Experts Group, "Post processing with special emphasis on block edges in case Annex J is not used," 2 pp. (1997).
CA		Study Group 16, Video Coding Experts Group, "Addition of 'comfort noise as post processing," 2 pp. (1997).

EXAMINER SIGNATURE:	/Chikaodili Anyikire/	DATE CONSIDERED:	01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
		Attorney Docket Number	3382-66954
		Application Number	10/680,072
		Filing Date	October 6, 2003
		First Named Inventor	Srinivasan
		Art Unit	2621
		Examiner Name	--

CA		Various, excerpts of reference software and documentation for H.26L JM, including "Encoding Types and the Related Variables in H.26L TML Software," "Unified Coding Style for the H.26L Reference Software," "global.h," "ldecod.c," "output.c," "b_frame.c," "image.c" (2001-2002).
CA		ISO/IEC, "ISO/IEC 11172-2, Information technology - Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s - Part 2: Video, 112 pp. (1993).
CA		Ebrahimi, "MPEG-4 Video Verification Model: A video encoding/decoding algorithm based on content representation," 30 pp. (1997).
CA		ISO/IEC, "JTC1/SC29/WG11 N2202, Information Technology - Coding of Audio-Visual Objects: Visual, ISO/IEC 14496-2," 329 pp. (1998).
CA		ITU-T, "ITU-T Recommendation H.261, Video Codec for Audiovisual Services at p x 64 kbits," 25 pp. (1993).
CA		ITU-T, "ITU-T Recommendation H.262, Information Technology - Generic Coding of Moving Pictures and Associated Audio Information: Video," 205 pp. (1995).
CA		ITU-T, "ITU-T Recommendation H.263, Video coding for low bit rate communication," 162 pp. (1998).
CA		Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG, "Draft ITU-T Recommendation and Final Draft International Standard of Joint Video Specification (ITU-T Rec. H.264 | ISO/IEC 14496-10 AVC," 253 pp. (May 2003).

EXAMINER SIGNATURE:	/Chikaodili Anyikire/	DATE CONSIDERED:	01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

KBR:kbr 03/04/04 3382-66954 256011

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

MAR 11 2004 JC67

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66954
Application Number	10/680,072
Filing Date	October 6, 2003
First Named Inventor	Srinivasan
Art Unit	2621
Examiner Name	--

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
CA		Kuo et al., "Adaptive Postprocessor for Block Encoded Images," IEEE Trans. on Circuits and Systems for Video Technology, Vol. 5, No. 4 (Aug. 1995).
CA		O'Rourke et al., "Improved Image Decompression for Reduced Transform Coding Artifacts," IEEE Trans. on Circuits and Systems for Video Technology, Vol. 5, No. 6, (Dec. 1995).

EXAMINER SIGNATURE: /Chikaodili Anyikire/	DATE CONSIDERED: 01/11/2007

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.